3953

BILL NO. S-78-01-35

SPECIAL ORDINANCE NO. S-23-78

AN ORDINANCE approving Change Order No. 18 in connection with Water Quality Control Project, Job No. 3263.8D.

BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF FORT WAYNE, INDIANA:

SECTION 1. That Change Order No. 18 to Hagerman-Shambaugh - Joint Bidders in connection with Water Pollution Control Plant Additions in the amount of $492,060.57, to be paid from Federal Funds, as set out in the specifications, is hereby in all things ratified, confirmed and approved.

SECTION 2. This Ordinance shall be in full force and effect from and after its passage and approval by the Mayor.

Councilman

APPROVED AS TO FORM
AND LEGALITY.

CITY ATTORNEY

Read the first time in full and on motion by Burns, seconded by Stier, and duly adopted, read the second time by title and referred to the Committee on City Utilities (and the ~~City Plan Commission~~ for recommendation) and Public Hearing to be held after due legal notice, at the Council Chambers, City-County ~~Building~~, Fort Wayne, Indiana, on _____, the _____ day of _____, 19__, at _____ o'clock ____ M., E.S.T.

DATE: 1-24-78

Charles W. Westerman
CITY CLERK

Read the third time in full and on motion by Burns, seconded by Schmidt, and duly adopted, placed on its passage.

PASSED (~~LOST~~) by the following vote:

	AYES	NAYS	ABSTAINED	ABSENT	TO-WIT:
TOTAL VOTES	7	0		2	
BURNS	✓				
HINGA				✓	
HUNTER	✓				
MOSES				✓	
NUCKOLS	✓				
SCHMIDT, D.	✓				
SCHMIDT, V.	✓				
STIER	✓				
TALARICO	✓				

DATE: 2-14-78

Charles W. Westerman
CITY CLERK

Passed and adopted by the Common Council of the City of Fort Wayne, Indiana, as (~~ZONING MAP~~) (GENERAL) (ANNEXATION) (SPECIAL) (~~APPROPRIATION~~) ORDINANCE (~~RESOLUTION~~) No. G-22-78 on the 14th day of February, 19 78

ATTEST: (SEAL)

Charles W. Westerman
CITY CLERK

Samuel J. Talarico
PRESIDING OFFICER

Presented by me to the Mayor of the City of Fort Wayne, Indiana, on the 15th day of February, 19 78, at the hour of 11:30 o'clock A. M., E.S.T.

Charles W. Westerman
CITY CLERK

Approved and signed by me this 22nd day of February, 19 78 at the hour of 9:00 o'clock A M., E.S.T.

Robert E. Armstrong
MAYOR

Bill No. S-78-01-35

REPORT OF THE COMMITTEE ON CITY UTILITIES

We, your Committee on City Utilities to whom was referred an Ordinance Approving Change Order No. 18 in connection with Water Quality Control Project, Job No. 3263.8D

have had said Ordinance under consideration and beg leave to report back to the Common Council that said Ordinance DO PASS.

PAUL M. BURNS - CHAIRMAN

JAMES S. STIER - VICE CHAIRMAN

VIVIAN G. SCHMIDT

WINFIELD C. MOSES, JR.

FREDRICK R. HUNTER

DATE 2-14-78 CONCURRED IN

CHARLES W. WESTER, CITY CLERK

Memorandum

To Howard Biggs Date 1-5-78

From Neil Wisler

Subject WPC Plant Expansion - Division I

COPIES TO:
Paul Brunner

Enclosed is change order #18 for additional work on Division I.

We have reviewed this change order and it has been signed by the contractor and engineer.

We are submitting to you for your review and approval, prior to transmitting to Board od Works.

Neil Wisler
Programs Manager
Water Pollution Control Plant

NW/gw

Enclosure

Approved 1/19/78
H.S.B.
Copies of Change Order #18 to be discussed at meeting with I.S.B.H. on 1/19/78

Job No. 3263.80

PROJECT Water Quality Control Project OWNER City of Fort Wayne, Indiana

DIVISION/~~XXXXXXXX~~ I - Water Pollution Control Plant Additions

CHANGE ORDER NO. 18

TO: Hagerman-Shambaugh - Joint Bidders

% Hagerman Construction Corporation

P.O. Box 690 - 403 Strauss Building

Fort Wayne, Indiana 46801

You are hereby authorized to make the following additions and/or deductions to your contract amount.

	Previous Contract Amount	Increase	Decrease	Net Change ~~(Deduct)~~ (Add)	Revised Contract Amount
TOTAL	$ 21,332,230.10	$ 492,834.78	$ 774.21	$ 492,060.57	$ 21,824,290.67

Description of Change:	Add	Deduct
Item No. 1		
Modify as required the specified and installed 4160 volt switch gear and double-ended 480/277 volt switchboard plus expand the electrical distribution system by furnishing all labor and material necessary to install, wire and connect an automatic transfer switch, a 2000 KVA 4160/480/277 volt, 3 phase, 4 wire transformer, a 480/277 volt distribution switchboard, motor control center MCC "P-5", a manual transfer switch for the raw sewage pumps, and parallel/sychronizing control and remote Instrumentation wiring as shown on the attached drawings. Following is a breakdown of the cost:		
1A. Changes to 4160 volt switchgear.		
Material	$ 7,483.77	
Labor	5,971.93	
Subcontractor Overhead & Profit	2,691.14	
Subcontractor Job Management, etc.	3,078.38	

PROJECT WATER QUALITY CONTROL PROJECT Job No. 3263.8D

CHANGE ORDER NO. 18

Description of Change:	Add	Deduct
1B. Changes to double-ended 480/277 volt switchboard.		
Material	$ 2,800.00	
Labor	1,385.04	
Subcontractor Overhead & Profit	837.00	
Subcontractor Job Management, etc.	714.72	
1C. Automatic transfer switch.		
Material	$44,335.26	
Labor	10,099.08	
Subcontractor Overhead & Profit	10,886.87	
Subcontractor Job Management, etc.	5,204.14	
1D. 2000 KVA 4160/480/277 volt transformer.		
Material	$70,473.46	
Labor	8,023.26	
Subcontractor Overhead & Profit	15,699.34	
Subcontractor Job Management, etc.	4,134.44	
1E. 480/277 distribution switchboard.		
Material	$13,950.19	
Labor	7,997.98	
Subcontractor Overhead & Profit	4,389.63	
Subcontractor Job Management, etc.	4,121.40	
1F. Motor Control Center MCC-P5.		
Material	$11,150.50	
Labor	39,379.27	
Subcontractor Overhead & Profit	10,105.95	
Subcontractor Job Management, etc.	20,699.42	
1G. Feeders and control wiring for raw sewage pumps.		
Material	$ 3,515.82	
Labor	9,737.36	
Subcontractor Overhead & Profit	2,650.64	
Subcontractor Job Management, etc.	5,017.73	

Description of Change:	Add	Deduct
1H. Parallel synchronizing control circuitry and remote instrumentation wiring.		
Material		$ 774.21
Labor	$ 1,630.26	
Subcontractor Overhead & Profit	171.21	
Subcontractor Job Management, etc.	840.10	
SUBTOTAL ITEMS 1A THROUGH 1H	$329,175.29	$ 774.21
NET CHANGE - ELECTRICAL (ADD)	$328,401.08	
1I. Joint Bidders additional cost for Item No. 1.		
Painting	$ 1,633.00	
Job Management	68,172.00	
Overhead and Profit	31,856.49	
Revision to Parallel Synchronizing Switchgear	61,998.00	
SUBTOTAL ITEM 1I	$163,659.49	
TOTAL ALL ITEMS	$492,834.78	$ 774.21
TOTAL NET CHANGE (ADD)	$492,060.57	

PROJECT WATER QUALITY CONTROL PROJECT Job. No. 3263.8D

CHANGE ORDER NO. 18

PAGE -4-

Description of Change: Add Deduct

This Change Order requires an extension of the Contract date from February 8, 1978, to July 14, 1978. The 156-day extension is required for the execution of changes required, and all costs for the electrical subcontractor are included for this period of time only. However, it is recognized that this change order does not include any changes to the process control and computer system, and no costs associated with the process control and computer system or costs flowing from these items have been included.

It is recognized that as a direct result of this change order, there may be additional time required in commencing, due to a waiting period required for approval and manufacture of major equipment items. The costs associated with any additional time will be evaluated and addressed in a subsequent change order at such time as the extent of the required time is determined.

RECOMMENDED:

HOWARD NEEDLES TAMMEN & BERGNEDOFF
HENRY B. STEEG & ASSOCIATES DIVISION

By Roy N. Kocher

Title Project Engineer Date 12/28/77

ACCEPTED:

HAGERMAN-SHAMBAUGH, Joint Bidders
ACCEPTED FOR HAGERMAN CONSTRUCTION CORP.
CONTRACTOR

By Mark T. Hagerman

Title Vice Pres. Date 1-4-78

ACCEPTED FOR SHAMBAUGH & SON, INC.
CONTRACTOR

By [signature]

Title [illegible] Date 1/4/78

APPROVED:

CITY OF FORT WAYNE, INDIANA
OWNER

By Henry P. Wehrenberg
Henry P. Wehrenberg, Chairman

Ethel H. LaMar
Ethel H. LaMar, Member

Max Scott, Member

Title BOARD OF PUBLIC WORKS

Date

Change Order No. 18

Item No. 1

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: Originally the electrical distribution system was designed so that two on-site generators could be manually paralled and synchronized with an electrical power supply furnished by a City owned utility company. In 1975, the City's utility company was purchased by the Indiana & Michigan Electric Co., which required extensive relaying and circuit breaker changes before the generators could be interconnected to their electrical system. To avoid excessive changes to the specified electrical equipment already installed, modifications were made to the electrical distribution system. These changes in the electrical distribution system will allow the two engine generators to operate independently of the Public Utility Company's electrical system.

2. Will proposed change alter size of the project? Yes X No _____

   If yes, explain

   Additional material, labor and supervision are required.

3. Affect on operation and maintenance cost of this project:

   The modifications to the electrical distribution system will provide more flexibility and a safer operating system because an automatic transfer switch is being added to the project which will allow the engine generators to start in case of a power failure. The addition of the transfer switch will still allow the use of the generators in the event manual operation is desired.

_____

Engineer

Sub Item 1A.

Change Order No. 18

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The 4160 volt main circuit breaker trip setting and feeder to the 4160 volt sub-distribution switchgear must be increased in ampacity in order to accommodate the new 2000 KVA, 4160/480/277 volt, 3 phase, 4 wire transformer.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required. (See Item No. 1)

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 18

Sub Item 1B. Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The addition of the new 2000 KVA transformer and 480/277 volt switchboard required that the raw sludge pumps and certain other feeders be transferred from the double-end 480/277 volt switchboard to the new switchboard in order for these feeders to receive power from the generator in case of a power failure.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor required. (See Item No. 1)

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 18

Sub Item 1C.

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The automatic transfer switch is necessary to provide a means of transferring the new single-ended 480/277 volt switchboard from the normal power supply to the power supply furnished by the engine generators.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required. (See Item No. 1)

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 18

Sub Item 1D

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The 2000 KVA, 4160/480/277 volt transformer is required to reduce the normal and generator power supplies from 4160 volts, 3 phase, 3 wire to 480/277 volt, 3 phase, 4 wire services for the various motor loads connected to the new single-ended 480/277 volt switchgear.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required. (See Item No. 1)

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 18

Sub Item 1E.

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The 480/277 volt distribution switchboard is required to provide a circuit breaker protection and a means of distributing the branch feeders to the large power and motor loads being served from the 2000 KVA transformer.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required. (See Item No. 1)

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 18

Sub Item 1F.

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: Motor Control Center MCC "P-5" is required to provide circuit breaker protection and motor starters for the jacket water pumps, plant water pumps, utility sub-system booster pumps, compressor, and other branch circuits, requiring power while the engine generators are in operation.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material and labor are required. (See Item No. 1)

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 18

Sub Item 1G. Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The two (2) separate and independent feeders originally serving the VFD control system for the five (5) new sewage pumps were changed to one (1) feeder from the new unit substation to the VFD controller plus an intercom telephone was added at the VFD controller for communications with the main plant control room.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional material is required. (See Item No. 1)

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

Change Order No. 18

Sub Item 1H.

Board Order No. _____

REQUEST AND JUSTIFICATION FOR CHANGE

1. Necessity for change: The parallel synchronizing control circuitry wiring is required to interconnect the engine generator control panels with the new transfer switch while the remote instrumentation wiring is required to interconnect the transfer switch to the main control panel.

2. Will proposed change alter size of the project? Yes X No _____

If yes, explain

Additional labor is required. (See Item No. 1)

3. Affect on operation and maintenance cost of this project:

N/A

_____

Engineer

R2c 3453

TITLE OF ORDINANCE SPECIAL ORDINANCE - CHANGE ORDER NO. 18 - WATER QUALITY CONTROL PROJ., WATER POLLUTION CONTROL PLANT ADD., DIV. I

DEPARTMENT REQUESTING ORDINANCE BOARD OF PUBLIC WORKS 2-78-01-25.

SYNOPSIS OF ORDINANCE CHANGE ORDER NO. 18 - WATER QUALITY CONTROL PROJECT, WATER POLLUTION CONTROL PLANT ADD., DIV. I, HAGERMAN-SHAMBAUGH, JOINT BIDDERS FOR MODIFICATIONS TO ELECTRICAL DISTRIBUTION SYSTEM, WHICH WILL ALLOW TWO ENGINE GENERATORS TO OPERATE INDEPENDENTLY OF THE PUBLIC UTILITY CO.'S ELECTRICAL SYSTEM; ADDITION OF TRANSFER SWITCH TO ALLOW USE OF GENERATORS IN EVENT MANUAL OPERATION IS DESIRED: NEW 4160 VOLT MAIN CIRCUIT BREAKER TRIP SETTING AND FEEDER TO ACCOMMODATE THE NEW 4 WIRE TRANSFORMER PLUS ADDITIONAL TRANSFORMER AND SWITCHBOARD TO RECEIVE POWER FROM THE GENERATOR IN CASE OF POWER FAILURE, ADDITION OF AUTOMATIC TRANSFER SWITCH TO CONTROL POWER SUPPLY FURNISHED BY ENGINE GENERATORS, ADDITION OF 2000 KVA, 4160/480/277 VOLT TRANSFORMER TO REDUCE NORMAL AND GENERATOR POWER SUPPLIES FROM 4160 VOLTS, 3 PHASE, 3 WIRE TO 480/277 VOLT, 3 PHASE, 4 WIRE SERVICES FOR THE VARIOUS MOTOR LOADS CONNECTED TO THE NEW SINGLE-ENDED 480/277 VOLT SWITCHGEAR AND INSTALLATION OF 480/277 VOLT DISTRIBUTION SWITCHBOARD TO PROVIDE CIRCUIT BREAKER PROTECTION AND MEANS OF DISTRIBUTING BRANCH FEEDERS TO THE LARGE POWER AND MOTOR LOADS BEING SERVED FROM THE 2000 KVA TRANSFORMER, ETC.
REVISED CONTRACT AMOUNT INCLUDING THIS CHANGE IS $21,824,290.67

EFFECT OF PASSAGE MODIFICATION AND EXPANSION OF ELECTRICAL DISTRIBUTION SYSTEM

EFFECT OF NON-PASSAGE CORRECTIVE AND PROTECTIVE MEASURES IN ELECTRICAL DISTRIBUTION SYSTEM NECESSARY IN CASE OF POWER FAILURE.

MONEY INVOLVED (DIRECT COSTS, EXPENDITURES, SAVINGS) $492,060.57 - FROM FEDERAL FUNDS

ASSIGNED TO COMMITTEE

EP